

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An apparatus for photocuring a coating on a target fiber, comprising:

a laser source;

a beam expander for expanding an output of the laser source;

a first lens operable to focus an output of the beam expander on the coating disposed on the target fiber, wherein the coating is ~~[[reponsive]]~~ responsive to a ~~[[wavelength]]~~ wavelength of light emitted from the laser source; and

a concave optical element disposed on an opposite side of the target fiber relative to the beam expander and said first lens, wherein the concave optical element comprises a half cylinder mirror.

2. (original): The apparatus of claim 1, wherein said first lens comprises a plano-concave lens with a planar side disposed towards said beam expander.

3. (original): The apparatus of claim 1, wherein said laser source outputs radiation in a visible light range.

4. (original): The apparatus of claim 3, wherein said laser source is a continuous wave laser.

5. (original): The apparatus of claim 3, wherein said laser source is a pulsed laser.

6. (original): The apparatus of claim 1, further comprising a magnetic field source which is operable to apply a magnetic field about said target fiber.

7. (Currently Amended - to reinstate original). The apparatus of claim 1, wherein [[siad]] said laser source is disposed at least 2 meters away from said target fiber..

8. (original): The apparatus of claim 6, wherein said laser source is a continuous wave laser emitting light in the UV range between 300 and 400 nm.

9. (original): The apparatus of claim 1 further comprising a second lens disposed between said first lens and said concave optical element.

10. (original): The apparatus of claim 9, wherein said second lens comprises a cylindrical lens.

11. (original): The apparatus of claim 10, wherein said laser source is disposed at least 2 meters away from said target fiber.

12. (currently amended): A method of photocuring a coating on an optical fiber, comprising:

expanding a laser beam to produce an expanded diameter laser beam;
focusing the expanded diameter laser beam to a strip of light having a diameter that is larger than a diameter of the fiber onto a front side of the fiber to cure the fiber; and
reflecting the laser beam strip of light to a rear side of the fiber, wherein reflecting the laser beam to the rear side of the fiber includes reflecting the laser beam with a half cylinder mirror.

13. (original): The method according to claim 12, further comprising: applying a magnetic field around the fiber.

14. (original): The method according to claim 12, wherein the laser beam continuously outputs light in a visible portion of electromagnetic spectrum.

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15. (original): The method according to claim 12, wherein the laser outputs pulses of visible light.

16. (original): The method according to claim 12, wherein said laser beam emits in the range of 300-400 nm.

17. (original): The method according to claim 12, wherein said laser beam emits radiation in the range of 400-800 nm.

18. (original): The method according to claim 12, wherein a source of said laser beam is disposed at least 2 meters away from the fiber.

19. (original): The apparatus of claim 1, wherein the laser source outputs radiation in a UV radiation range.

20. (original): The apparatus of claim 3, wherein the laser source outputs radiation in a range of 400-800 nm.

21. (previously presented): The apparatus of claim 1, further comprising the target fiber having the coating disposed thereon.

Claims 22-23 (cancelled).

24. (new): An apparatus for photocuring a coating on a target fiber, comprising:
a laser source;
a beam expander for expanding an output of the laser source;
a first lens operable to focus an output of the beam expander on the coating disposed on the target fiber, wherein the coating is responsive to a wavelength of light emitted from the laser source; and

a concave optical element disposed on an opposite side of the target fiber relative to the beam expander and said first lens,

wherein said laser source, said beam expander, said first lens and said concave optical element are aligned in a linear disposition with each other.

25. (new): A method of photocuring a coating on an optical fiber, comprising:

- expanding a laser beam to produce an expanded diameter laser beam;
- focusing the expanded diameter laser beam to a strip of light having a diameter that is larger than a diameter of the fiber onto a front side of the fiber to cure the fiber; and
- reflecting the laser beam strip of light to a rear side of the fiber, wherein the expanding, the focusing and the reflecting are provided by expanding, focusing and reflecting elements each aligned in a linear disposition with each other.